

II. JONES: MEDICAL AND SURGICAL MEMOIRS.

MEDICAL AND SURGICAL MEMOIRS: Containing Investigations on the Geographical Distribution, Causes, Nature, Relations and Treatment of Various Diseases. 1855 to 1876. By Joseph Jones, M. D., Professor of Chemistry and Clinical Medicine, Medical Department University of Louisiana, etc. Volume I. Printed for the Author. New Orleans, 1876.

This elaborate volume of over eight hundred pages, is a monument of industry, and with the succeeding two volumes, when they appear, will form, if not the most valuable, certainly one of the most laborious contributions to the medical literature of the present day. The author, Dr. Joseph Jones, of New Orleans, is well known as a leading southern physician, to whom we are already indebted for many valuable papers, among them an important contribution in the medical memoirs of the United States Sanitary Commission. To him, indeed, it seems probable that we shall be mainly indebted for the preservation of the results of the experience of the southern military surgeons during the rebellion, the lack of which, if altogether lost to medical science, would be a deprivation of one of the compensations drawn from among so many evils entailed by the great war. As it is, we can only regret that there were not a greater number of intelligent, scientific observers like Dr. Jones among the army surgeons of the war.

The present volume embodies in part these results in the different memoirs it contains, especially in those on tetanus, cerebro-spinal meningitis and pneumonia, as it occurred in the confederate army. It is not confined, however, to the observations made during the military service of the author, he has drawn from his experience in all classes of practice, has experimentally investigated various subjects, and the extent of his literary research is amply shown in all parts of his book. And, while we cannot say that it is altogether complete in this respect, it will, nevertheless, prove useful as a work of reference, especially in matters relating to some points of neurology.

About three-quarters of the book is devoted to the discussion of subjects connected with the nervous system, and therefore, directly within the scope of this journal. We shall devote what space we can afford to them, leaving the remainder, though in some respects equally worthy, untouched.

The three memoirs which make up the greater portion of Dr. Jones' work are, respectively, one on traumatic tetanus, its nature and treatment, another on cerebro-spinal meningitis, especially as it appeared in the confederate army during the civil war, and a lengthy paper entitled "An Introduction to the Study of Diseases of the Nervous System." This latter, though mentioned last, is the first in the book and stands there, as it were, as a kind of introduction. The author, however, states in his preface, that it is to be considered rather as a separate monograph, "the chief design of which is to aid students and practitioners of medicine in the prosecution of original investigations and researches in the physiology and pathology of the nervous system." We shall not attempt to thoroughly analyze this memoir; it is too elaborate and contains too great an amount of matter on a very extensive range of subjects, to allow us to do so, but will merely give, somewhat briefly, the impression it has produced as fulfilling or failing in its purpose.

The plan followed by the author is the historical one; commencing with the very oldest writers, Hippocrates, Aristotle, and others, and coming down to the more modern ones in the discussion of each subject, portion or function of the nervous system. This has its advantages; it affords a history of the advance that has been made; but the advantage is mostly to the advanced student already based in a certain degree of knowledge of the subject, and is hardly at all to one who seeks here to become informed for the first time. It necessitates either a selection of the more advanced views from the whole, which few students will be likely to make, or the wading through in course, of the accounts of the cruder opinions, based upon imperfect knowledge, of the older observers. A student should have a tolerable acquaintance with the present *status* of nerve physiology and pathology, before he is obliged to go over the historical data which make up much of the substance of this monograph. We state this as the opinion we have formed from our own experience in the study of nervous disorders, and we think that this memoir ought rather to be entitled a historical sketch of investigations in nervous pathology and physiology, than bear the name here given it. With the other name it would pass under its true colors, as less misleading. This, however, is no fault peculiar to this work; the same plan, defective and unscientific as it appears to us, is the one largely adopted in treatises of this kind, professing to be introductory to a complicated study like that of nervous diseases.

Apart from this defect of method, which, in fact, is such only, if we consider the memoir to be what its title indicates, an introductory work, it is, in very many respects, a quite satisfactory *resume* of the history of opinions and advances in neurological medicine from the earliest period down to the present time, with critical discussion of very many of the subjects. Throughout,

it is more like a cyclopedia article on the nervous system, written for reference, than a memoir for study; and, in this capacity, it is excellent in its way. The author has evidently carefully studied the subject, and, while he presents no specially original views or details of investigations, he has drawn from a great number of sources a vast amount of facts and opinions, which he has collated and discussed, for the most part, very judiciously. Still, we notice several things that detract somewhat from its value as an encyclopedic memoir, and which may be noticed here. While the literary industry of the author is evident on every page, and a vast number of authorities are referred to, yet the amount of space given to the more recent writers on some subjects, is hardly in proportion to the importance and value of their observations; and a few, not too recent to be noticed here, are omitted altogether. Thus, for example, we find no mention whatever of the researches and theories of Meynert, a writer who certainly stands among the very first authorities on the anatomy and physiology of the nervous centres, and whose work has exerted very remarkable influence on the researches and opinions of recent investigators. Such an omission is a defect in such a work, seriously marring its completeness. Other similar omissions might be mentioned, but this is the most prominent and important one. It seems, moreover, that the author's acquaintance with German literature can hardly be extensive at first hand, though his reading has certainly been very extensive in the translations, and references in English and French. A rather curious evidence of this fact is found on page 105, where a reference is made to an author who is here quoted under the name "Orig Mittheil;" and the same mistake is carried into the very useful index, at the close of the book, under the head "Mitheil and Orig."

While, as we have stated, the subjects are generally well treated, and the conclusions arrived at are generally safe and judicious, there are still one or two points where opinions appear to us to be stated without, perhaps, a complete consideration of all their possible bearings. Thus the portion of the memoir on the subject of the nerve force is mainly a discussion of the theories of animal electricity, largely extracted from the work of De la Rive. As such, it is perhaps, on the whole, a satisfactory one, though of course it fails to include the more recent results of investigations on this subject. Since the physiological theories on this subject are so elaborate, and the experimental investigations so complicated, it has become, in our opinion, really a matter for doubt, whether, in the present state of the question, it worth the while of any but those who have ample leisure, and abundant inclination to attempt to master them in all their details, or whether a simple statement of leading facts, apart from questionable hypotheses, stated clearly with a view to their pathological and therapeutic relations, is

not amply sufficient for most purposes, to those not especially engaged in this physiological study. In this light, the statements here given are, perhaps, sufficient; but the conclusion directly reached by the author, that the nerve force, if not identical with, is intimately connected with electricity, light, heat, and other physical forces, whatever may be the mental reservations of the author, is stated in a manner that is hardly sufficiently guarded against the possible inferences to which it may give rise. Dr. Jones' language would seem to indicate that there is a decided difference between the nerve force of a ganglion and that of a nerve fibre, than which, it appears to us, nothing would be harder to demonstrate. He recognizes the difference of the original nervous impulse from physical force in this manner, but so states it as to convey the impression stated above. The fault we would find with this conclusion, is not that it is necessarily a false one, but that it is hardly sufficiently warranted, and that he has not followed it out, but has merely adopted it for one set of nerve tissues, when it might have been applied, with equal propriety, to all; and the legitimate issue of this doctrine is hardly in agreement with some of the thoroughly orthodox and teleological expressions the author uses in the latter part of the paper, when speaking of the physical and intellectual constitution of man.

The second memoir in the volume is entitled, "Investigations on the nature, causes, relations and treatment of traumatic tetanus, illustrated by observations on various diseases of the nervous system, and by experiments on living animals with certain poisons." The above title gives some idea of the scope and extent of the paper; it occupies two hundred and sixty-seven closely printed pages. It is hardly necessary to say that an exhaustive notice of all its details is out of the question, we can here, as in the other cases, only call attention to some of its more prominent features.

The first general head of the author is "observations on the natural history of traumatic tetanus," and he begins his subject with the report of a very fully and carefully observed case in his own military practice, which ended in recovery. Then he takes up and discusses the subject of the temperature in this disease, quoting numerous authorities, and recognizing the fact pointed out by other authors, that an excessive rise of temperature is indicative of a fatal termination, and accounting for it mainly by three possible hypotheses; that it is caused either by the arise of an actual inflammation of the nervous gray matter, by the irritation of the centres regulating animal heat, or to the extension of the irritation to the vaso-motor system, favoring rather the first of these three hypotheses than the others. Next taking up the question as to the portion of the nervous system involved, he excludes the cerebrum from all participation in the production of the disease; the cerebellum, however,

he thinks may have its part, in some cases at least. Some of his remarks on this point show a rather striking resemblance to those of M. Luys, whose ideas, in part at least, he seems to have adopted. The principal seat of the disorder he seems to think, however, is in the gray matter of the cord.

In like manner he goes over the conditions of the circulation, the respiration and the secretory functions, all of which are discussed at length, but we cannot follow him here. He ends the chapter with his conclusions in regard to the text case with which it commences, in which he develops the particular ideas held by him, as to the electrical changes in the nerves and muscles during the progress of this disease. Of course, these views are dependent upon the other one favored by Dr. Jones, that nerve force and electricity are closely related if not identical.

The next chapter begins with the subject of the pathological anatomy of tetanus which seems pretty well discussed. Then follows a long section on the relations of tetanus to various nervous diseases, much of which seems hardly to be very relevant to the matter in hand, however interesting in other respects. Thus we do not exactly see the relations with tetanus of such disorders as mania, not even considering their anatomical lesions, nor the necessary connection of the effects of moral causes and the imagination on the bodily health, to this affection. The disease that has the greatest superficial resemblance to tetanus, of all nervous affections, hydrophobia, is not mentioned at all in this connection, though a passage near the close of the chapter may perhaps indicate the reason, namely, that the author considers that hydrophobia is possibly a blood disease. The general summary of conclusions, however, which immediately follows, is in many respects very just, notwithstanding the fact that it contains some points, which, had we time, we should like to examine. This general remark we will offer, there is too much said, or rather that which is said, might, we think, have been as well or better stated in fewer words, and a few things could have been left out altogether without any serious disadvantage. They are not very important, however, and we have not the space to specify them here. The remainder of the chapter is devoted to relations of traumatic tetanus to climate, etc., a subject that seems to be well treated by the author.

The following chapter is given to the account of experimental investigations of the author, on the action of certain poisons and certain physical agents and operations on living animals and plants, undertaken, it is stated, for the purpose of throwing light on the action of fever poisons and the phenomena of convulsive diseases. We can pass this chapter with a single general statement, the experiments are too numerous to be noticed closely and in detail. While they contain much that is of interest and value to the physiologist, they seem, nevertheless, for the most part, to have been performed in a rather crude and less scientific

manner than should be the rule with physiological experimentation. The numerous repetitions of the simple poisonings, sections of the medulla, etc., were, it appears to us, hardly needful, and the knowledge derived from them, we think, had to a large extent been already obtained by other experimenters who had also ascertained with greater exactness, the part played by the different portions of the nervous system in the production of the effects observed. We fear, we could hardly vindicate all of Dr. Jones' experiments before a jury of anti-vivisectionists. We should be very sorry to convey an impression that these experiments are valueless,—they are very far from that, but the labor and sacrifice of life which they entailed, might, considering what has been done elsewhere in the same direction, have been spared, at least to some extent.

On the chapter on the treatment of traumatic tetanus, we have no special remarks to offer. It is clear, full, and practical. Of course in the treatment of an affection like tetanus, the mortality of which is so high, and recovery from which seems to depend upon so many mysterious causes, there will be differences of opinion, but Dr. Jones has, we think, stated with fairness and thoroughness nearly all that ought to be said on the subject. The chapter is a very useful, critical compendium for reference to those who have to treat this terrible disorder.

The section of the volume given to the subject of cerebro-spinal meningitis, comprises four chapters, and about one hundred and forty-three pages. The subject is handled in a similar manner with that of tetanus; the historical sketch, or introduction, is first; then comes the natural history of the disease, including an account of its pathological anatomy,—a discussion of its relations with certain other diseases, and its treatment. We will proceed to notice some of these matters separately, and offer such criticisms as appear to us to be indicated by the character of the work.

In the first place, the historical introduction is a well written statement, diluted, however, in some respects, and not, perhaps, in all parts altogether as relevant to the subject as might be desired. This is true only of the first few pages; it is not a fault peculiar to this work, but is often met with in medical treatises. We always regret to meet with it, nevertheless. The valuable part of this chapter is met with after the author fairly comes down to his work, in quoting authors, giving accounts of diseases by the ancients, which, there is a fair presumption, at least, were cases of cerebro-spinal meningitis, and then recapitulates its modern history, especially as it occurred in the Southern army, during the civil war. In the next chapter, the symptoms and history of the disease are reviewed, the various statements and views of the different authorities are discussed and criticised; and the author then gives his own conclusion, drawn from all the facts. He concludes cerebro-spinal menin-

gitis is not properly to be attributed to any special poison, or to be considered especially epidemic, but rather as analogous in its pathogeny and pathology to acute idiopathic peritonitis, pleuritis or pneumonia. He supports this opinion upon the grounds of the range of the symptoms in this disorder, the lack of regular and well-defined temperature variations, and the absence of any definite lesions in some cases showing the nervous centres to have been primarily involved. We think that in this Dr. Jones is in error,—the facts of the disease, or their more probable interpretation, point, in our opinion, to a morbid influence acting on the nerve centres. The variability of the symptoms, in some respects, together with their constancy in others, instead of being an argument against this view, seems to us rather to support it. Nor do we see this disease occurring under such circumstances, to say nothing of its infrequency, as to justify the opinion that its pathogeny is similar to that of simple acute idiopathic pneumonia, or pleuritis. But we must leave the discussion of this point for another place and occasion. We here wish simply, with our present knowledge, to express dissent from the conclusions stated in this memoir by Dr. Jones.

The remarks on the relations of malarial fever to the disorders in question, including extensive tabular statements and comparisons, are of interest. Dr. Jones appears not to recognize any combination of the two diseases, which we think may sometimes occur, and which may perhaps account for some of the peculiar cases mentioned by him in this connection. The experiments on the effects of gases and poisons on the blood,—though, from their numerous repetitions, somewhat open to the objections we have before stated,—are of interest, and show a very commendable courage and zeal in this line of research.

The chapter on treatment is one of the shortest in the whole volume. Dr. Jones advocates early and copious bleeding, mercurials, and a very active treatment generally. While we are not inclined to condemn his course altogether, we think caution should be specially observed in the employment of such active measures as he here directs,—at least, the greatest consideration should be given to the age, conditions, etc., of the patient, in adopting such measures; and we are very far from certain that general bleeding is an advisable measure, even in a minority of cases. As to the use of opium, stimulants, etc., which our author recommends in this period, we think his advice may be taken with safety; certainly he does not go too far.

The remaining portions of the book are devoted to subjects not specially pertaining to the nervous system, and we therefore will not extend our notice to include them here,—not because they are not, in their way, equally valuable, but because they do not come directly within the scope of this JOURNAL.

In concluding, we would here reiterate our high opinion of the industry and zeal of the author, and of the value of the

work as a contribution to medical literature. The criticisms we have offered appear to us to have been called for, and we would add to them the general observation, that the principal fault of the work is its diffuseness, and the want of necessary connection to the subject in hand, of a portion of its contents. We wish the author had found time to make it shorter. Dr. Jones impresses us as a man of wonderful industry, of admirable spirit, and possessed of the highest enthusiasm in his profession, but still wanting, in some degree, in the thorough scientific training and the accurate judgment that would enable him to bestow his labor in the way to bring about, in all cases, the best results. Notwithstanding this,—and it is a remark applicable to many others besides himself,—he has, under all the disadvantages he narrates in his preface, produced a work, as a whole, alike creditable to himself, and valuable to the world. We hope that the public spirit he has shown in the publication of this volume at his own expense, will be properly rewarded, and encouragement afforded him, to give the further results of his studies and experience to the world.

III.—HAMMOND: SPIRITUALISM AND ALLIED CAUSES AND CONDITIONS OF NERVOUS DERANGEMENTS.

SPIRITUALISM AND ALLIED CAUSES AND CONDITIONS OF NERVOUS DERANGEMENTS. By William A. Hammond, M. D., etc. Illustrated. New York: G. P. Putnam's Sons. P. 366. 1876.

By a regular process of evolution, this work has risen by stages, from a *Quarterly Review* article, of moderate length, to its present fair proportions. It relates to an attractive theme, is written in an attractive manner, and is one of various evidences of the literary activity of its author. It is dedicated "to all, few though they be, who are free from superstition;" according to our experience, an exceedingly small class, so small that we cannot be sure that we have met with one of its representatives.

As to his purpose in writing the work, Dr. Hammond says: "Throughout, my object has been to strip from the basis of fact, which almost always exists, the net work of error which